### § 63.1202

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

You means the owner or operator of a hazardous waste combustor.

(b) The acronyms used in this subpart refer to the following:

AWFCO means automatic waste feed cutoff.

CAS means chemical abstract services registry.

 $\it CEMS$  means continuous emissions monitoring system.

CMS means continuous monitoring system.

DRE means destruction and removal efficiency.

 $\it MACT$  means maximum achievable control technology.

MTEC means maximum theoretical emissions concentration.

 $\it NIC$  means notification of intent to comply.

[64 FR 53038, Sept. 30, 1999, as amended at 65 FR 42297, July 10, 2000; 65 FR 67271, Nov. 9, 2000; 66 FR 35103, July 3, 2001; 67 FR 6986, Feb. 14, 2002; 67 FR 77691, Dec. 19, 2002; 70 FR 59540, Oct. 12, 2005]

## §63.1202 [Reserved]

INTERIM EMISSIONS STANDARDS AND OPERATING LIMITS FOR INCINERATORS, CEMENT KILNS, AND LIGHTWEIGHT AGGREGATE KILNS

# § 63.1203 What are the standards for hazardous waste incinerators that are effective until compliance with the standards under § 63.1219?

- (a) Emission limits for existing sources. You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:
  - (1) For dioxins and furans:
- (i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or
- (ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 °F or lower based on the average of the test run average temperatures. (For

purposes of compliance, operation of a wet particulate control device is presumed to meet the 400 °F or lower requirement);

- (2) Mercury in excess of 130 μg/dscm corrected to 7 percent oxygen;
- (3) Lead and cadmium in excess of 240 μg/dscm, combined emissions, corrected to 7 percent oxygen;
- (4) Arsenic, beryllium, and chromium in excess of 97 μg/dscm, combined emissions, corrected to 7 percent oxygen;
- (5) For earbon monoxide and hydrocarbons, either:
- (i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or
- (ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;
- (6) Hydrochloric acid and chlorine gas in excess of 77 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and
- (7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.
- (b) Emission limits for new sources. You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:
- (1) Dioxins and furans in excess of 0.20 ng TEQ/dscm, corrected to 7 percent oxygen;
- (2) Mercury in excess of 45 μg/dscm corrected to 7 percent oxygen;

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- (3) Lead and cadmium in excess of 120 μg/dscm, combined emissions, corrected to 7 percent oxygen;
- (4) Arsenic, beryllium, and chromium in excess of 97  $\mu g/dscm$ , combined emissions, corrected to 7 percent oxygen;
- (5) For carbon monoxide and hydrocarbons, either:
- (i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (b)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as pro-
- (ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;
- (6) Hydrochloric acid and chlorine gas in excess of 21 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and
- (7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.
- (c) Destruction and removal efficiency (DRE) standard—(1) 99.99% DRE. Except as provided in paragraph (c)(2) of this section, you must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. You must calculate DRE for each POHC from the following equation:

 ${\rm DRE} = [1 - ({\rm W_{out}} \, / \, {\rm W_{in}})] \times 100\%$ 

Where:

- $W_{\rm in}$  = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream: and
- $\begin{aligned} W_{out} = \text{mass emission rate of the same POHC} \\ \text{present in exhaust emissions prior to release to the atmosphere.} \end{aligned}$
- (2) 99.9999% DRE. If you burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (see §261.31 of this chapter), you must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principle organic hazardous constituent (POHC) that you designate under paragraph (c)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinthan tetra-, penta-, hexachlorodibenzo-p-dioxins dibenzofurans. You must use the equation in paragraph (c)(1) of this section to calculate DRE for each POHC. In addition, you must notify the Administrator of your intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.
- (3) Principal organic hazardous constituents (POHCs). (i) You must treat the Principal Organic Hazardous Constituents (POHCs) in the waste feed that you specify under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section.
- (ii) You must specify one or more POHCs that are representative of the most difficult to destroy organic compounds in your hazardous waste feedstream. You must base this specification on the degree of difficulty of incineration of the organic constituents in the hazardous waste and on their concentration or mass in the hazardous waste feed, considering the results of hazardous waste analyses or other data and information.
- (d) Significant figures. The emission limits provided by paragraphs (a) and (b) of this section are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance.
- (e) The provisions of this section no longer apply after any of the following dates, whichever occurs first:

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- (1) The date that your source begins to comply with §63.1219 by placing a Documentation of Compliance in the operating record pursuant to §63.1211(c):
- (2) The date that your source begins to comply with §63.1219 by submitting a Notification of Compliance pursuant to §63.1210(b); or
- (3) The date for your source to comply with §63.1219 pursuant to §63.1206 and any extensions granted there under.

[67 FR 6809, Feb. 13, 2002, as amended at 70 FR 59541, Oct. 12, 2005; 73 FR 18979, Apr. 8, 2008]

# § 63.1204 What are the standards for hazardous waste burning cement kilns that are effective until compliance with the standards under § 63.1220?

- (a) *Emission limits for existing sources*. You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:
  - (1) For dioxins and furans:
- (i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or
- (ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial dry particulate matter control device is 400 °F or lower based on the average of the test run average temperatures;
- (2) Mercury in excess of 120 μg/dscm corrected to 7 percent oxygen;
- (3) Lead and cadmium in excess of 330 µg/dscm, combined emissions, corrected to 7 percent oxygen:
- (4) Arsenic, beryllium, and chromium in excess of 56  $\mu g/dscm$ , combined emissions, corrected to 7 percent oxygen;
- (5) Carbon monoxide and hydrocarbons. (i) For kilns equipped with a by-pass duct or midkiln gas sampling system, either:
- (A) Carbon monoxide in the by-pass duct or mid-kiln gas sampling system in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(i)(B) of this section, you

must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7), hydrocarbons in the by-pass duct or mid-kiln gas sampling system do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

- (B) Hydrocarbons in the by-pass duct or midkiln gas sampling system in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;
- (ii) For kilns not equipped with a bypass duct or midkiln gas sampling system, either:
- (A) Hydrocarbons in the main stack in excess of 20 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or
- (B) Carbon monoxide in the main stack in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii)(A) of this section, you also must document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7), hydrocarbons in the main stack do not exceed 20 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as pronane.
- (6) Hydrochloric acid and chlorine gas in excess of 130 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis, corrected to 7 percent oxygen; and